REMARKS

Applicants have received and reviewed the Office Action mailed June 18, 2003. In response to the Office Action, Applicants have amended claims 1, 2, and 13, and have added new claims 24 - 28. In view of these amendments and the following remarks, Applicants respectfully request reconsideration and a Notice of Allowance.

1. Information Disclosure Statement

Applicants have enclosed a courtesy copy of the Information Disclosure Statement submitted when this application was filed. The Examiner returned an initialed copy with the Office Action, but the Examiner overlooked the reference cited in the "Other Documents" section. The document cited in that section was the "Declaration of Eivind Stenersen with Exhibits A1 -D3." For the convenience of the Examiner, Applicants have enclosed a photocopy of the Stenerson Declaration and Exhibits. The Examiner is requested to initial this portion of the 1449 Form to indicate that he has read and considered the Declaration of Eivind Stenersen.

Applicants have also submitted herewith a translation of the Japanese Reference No. 3-154606, that was cited by the Examiner in the Office Action and listed on PTO-892 attached to the Office Action. It was noted the Patent Document Number on the PTO-892 form was incorrectly shown as "JP 3-145606 A" and should read "JP 3-154606 A". The Examiner is requested to consider this translated reference and initial the Form 1449 correctly showing the document as JP 3-154606. If any additional fees are required for filing of the translation document, please charge our Deposit Account No. 13-2725.

2. Objection to the Specification

The specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. In particular, the Office Action pointed out that the baffle plate thickness being no greater than 3.0 inches, as recited in claim 13, lacked antecedent basis in the specification.

The Examiner's attention is directed to page 15, lines 1 - 3. There, the specification states that the baffle plate has a thickness "typically not greater than 3 inches (about 76 mm)."

Applicants believe this sentence constitutes ample support in the specification for the claimed subject matter. Nevertheless, to address the concern of the Examiner, Applicants have amended claim 13 to change the dimension "3.0 in." to read "3 in."

Applicants request that this objection be withdrawn.

3. Rejection of the Claims Over U.S. Patent No. 5,116,499 to Deibel

Claims 1 - 4, 13, and 14 were rejected under § 103 as unpatentable over Deibel '499. Applicants disagree with this rejection and request reconsideration for at least the following reasons.

The invention of claim 1 is directed to a liquid filter construction having a combination of features including, among other things, a metal baffle plate, a metal can, and a filter element oriented within the interior of the can. The metal can is secured to the metal baffle plate along a laser welded seam. The claim requires that the metal baffle plate has an average cross-sectional thickness of at least 0.080 in. The claim further requires the metal can to have an average cross-sectional wall thickness of at least 0.008 in. and no greater than 0.048 in.

Applicants' specification discusses how filters that are made with a drawn, relatively thin, cylindrical metal housing and stamped metal baffle or cover plate, when tested to failure, will fail at the connection between the gasket retainer (which is welded to the cover plate) and the housing. The disclosure describes improvements over these types of filter systems. The disclosure describes filter systems, in which the prior art housing (or can) is secured to a baffle plate using laser welding. The can and the baffle plate have dissimilar thicknesses, so special techniques to result in this connection are described. These special techniques are described in Section G, pages 15 - 20.

The invention of claim 1 includes the fact that the metal can and the metal baffle plate have dissimilar thicknesses. The metal can is required to be a relatively thin-walled construction because the claim requires the metal can to have a cross-sectional wall thickness of at least 0.008 in. and no greater than 0.048 in. The claim requires the baffle plate to be relatively thick (when compared to the can) by reciting that the average cross-sectional thickness is at least 0.080 in. The can is required to be secured to the baffle plate along a laser welded seam.

Deibel '499 discusses how the prior art filter products are manufactured using a thin gauge metal can and a stamped steel or cast cover plate to secure the can. Deibel '499 specifically teaches away from using a thin gauge metal can. See column 3, lines 29 - 33. Specifically, Deibel '499 indicates that it utilizes a metal tubing rather than a deep-drawn can known in the art. Deibel '499 indicates that the end cap 16 is secured along a continuous circumferential weld 6 on the lapping edge of the metal tube at the point of engagement or the edge of the innermost circumference of the inward folded tube wall. One example given is using laser welding. By studying the drawings, it can been seen how the structure referred to as "an end cap" in Deibel '499 is illustrated as being the same thickness of the metal tubing of the side wall of the housing.

Applicants respectfully contend that Deibel '499 would be of no assistance to a person of ordinary skill in the art with respect to the claimed invention. Deibel '499 shows securing together two pieces that appear to be of identical thicknesses. One of ordinary skill in the art would not have known how to have secured together by way of laser welding two materials of dissimilar thicknesses (i.e. a metal baffle plate and metal can), as claimed in the invention of claim 1.

Deibel '499 discusses how the housing is constructed by folding the open end of the can inward over the peripheral lip surface area of the attachment plate and circumferentially welding the folded tube wall "in the same appropriate method and manner as described heretofore for the construction of the can 1, 16." Deibel '499, column 4, lines 56 - 62. It should be noted that Deibel '499 does not specifically refer to using laser welding at joint 22. The methods described previous to this passage in Deibel included "several types of welding technologies . . . applicable depending on the material specifications of the tube 1 and end cap 16. Laser welding is preferably utilized due to weld joint aesthetics and bonding features of more recently developed laser technology." Deibel '499, column 4, lines 9 - 14. While Deibel '499 describes the use of laser welding at joint 6, between the two pieces of material that appear to be similar in thickness, Deibel '499 did not specifically describe using laser welding at joint 22, between the two areas of dissimilar thickness. Deibel '499 is vague on this point, referring only to the "same appropriate method and manner described heretofore for the construction of the can". Deibel '499 does not provide a clear teaching of using laser welding at joint 22 between the can and the attachment

plate. Deibel '499 does not enable one skilled in the art to secure together with laser welding a relatively thick baffle plate to a relatively thin can.

Further, Deibel '499 does not disclose or suggest using a metal can with an average cross-sectional wall thickness of at least 0.008 in. and no greater than 0.048 in. Deibel '499 specifically teaches away from using a thin wall metal housing. Deibel '499 specifically teaches that it is advantageous to not use such a thin wall can, and rather, to use metal tubing.

For at least these reasons, it is respectfully submitted that claim 1 is patentable over Deibel '499.

Claims 2 - 8, 10 - 14, and new claim 24 each depend upon and further limit claim 1. It is respectfully submitted that each of these claims is also patentable over Deibel '499.

With respect to claim 3, it is noted that the claim requires a radially directed seal between the first end cap and the outer, annular surface of the tubular member. The Examiner pointed to the seal 10 as corresponding to this claimed structure. Applicants respectfully disagree. The seal 10 in Deibel '499 is actually between a retaining ring 12 and the outlet tube 7. The Examiner's attention is also directed to amended claim 2, upon which claim 3 depends, which requires the first end cap to comprise a compressible, moldable material. The flange structure in Deibel '499 shown at part 11 and referred to in Deibel as "an end cap" is "a metal, or other suitable material." Deibel '499, column 3, lines 43 - 47. Claim 2 requires the end cap to be the piece where the media pack is secured thereto. The "end cap" structure 11 in Deibel '499 is not a "end cap" as this term is used in the claim. Further, the radial seal shown in Deibel '499 is shown between the retaining ring 12 and the outlet tube.

With respect to claim 14, note that the claim requires the laser welded seam to be between the can and the outer annular surface of the baffle plate. The structure at 22 in Deibel '499 is not an outer annular surface of the baffle plate. The structure shown on Deibel '499 at 22 is an axial surface. Further, as discussed above, the joint at 22 in Deibel '499 is disclosed as a weld, but not necessarily a laser weld.

4. Rejection of Claims 5 - 8 and 12 as Unpatentable Over Deibel '499 in view of U.S. Patent No. 6,146,527 to Oelschlaegel

Claims 5 - 8 and 12 were rejected under § 103 as unpatentable over Deibel '499 and further in view of Oelschlaegel '527. Applicants disagree with these rejections. Claim 5 recites, among other things, that the first end cap radially abuts the outer, annular surface of the tubular member to form the radially directed seal. The Examiner relied upon Deibel '499 for this teaching. Applicants respectfully disagree.

In Deibel '499, there is an O-ring 10 that abuts the outer annular surface to form a seal. A retaining ring 12 in Deibel '499 holds the seal 10 in place. The potting material 21 in Deibel '499 does not contact the tubular member, because the central tube 13 as well as the retaining ring 12 are between the potting material 21 and the tubular member 7.

With respect to claim 6, it is noted that the Examiner relied upon the inner liner 13 disclosed in Deibel '499. Then, in articulating the rejection for claim 7, the Examiner again relied upon the inner liner 13 as corresponding to the rigid structural member that abuts the end of the can remote from the baffle plate and supporting the filter element. It is noted that claim 7 depends upon claim 6. Claim 7 uses the claim transitional phrase of "further including." Applicants respectfully submit that the Examiner made an improper rejection by relying upon the inner liner 13 in Deibel '499 both for the structure of the inner liner recited in claim 6 as well as the claimed rigid structural member abutting the end of the can remote from the baffle plate and supporting the filter element. It appears that this rejection is improperly made, and it is requested that the rejection be withdrawn.

5. Rejection of Claims 1 - 4, 13, and 14 Under § 103 as Unpatentable Over Japanese 3-154606 in view of Deibel '499

Claims 1 - 4, 13, and 14 were rejected under § 103 as unpatentable over Japanese Patent Document 3-154606 in view of Deibel '499. Applicants respectfully disagree with these rejections.

Applicants have submitted a translation of the Japanese Patent Document, for the Examiner's information. From reading the translation, one issue of discussion in the Japanese

document is having the dissimilar diameters in the casing. In the FIG. 5 embodiment of the Japanese patent document, the joint at 50 is described as an argon gas welding, silver brazing, etc. The Examiner relied upon Deibel '499 for disclosing the concept of providing a laser weld at "22" in an analogous filter and suggested that such a weld has improved aesthetics and bonding features. The Examiner concluded that it would have been obvious to have modified the Japanese filter so as to have included a laser weld as suggested by Deibel '499 in order to provide a weld having improved aesthetics and bonding features.

Applicants disagree. First, Applicants disagree that the joint 22 in Deibel '499 is fairly disclosed as being a laser weld. Applicants agree that a laser weld is disclosed at joint 6, but disagree that a fair reading of Deibel '499 discloses a laser weld at 22.

Moreover, Deibel '499 is not enabling to one skilled in the art for providing a laser welded seam between a thin can wall and a thick baffle plate. The one area where Deibel '499 does specifically disclose using laser welding shows it being used between two materials of the same thickness at joint 6.

For at least these reasons, it is respectfully submitted that claim 1 is patentable over the Japanese patent document in view of Deibel '499.

Claim 2 - 8, 10 - 14, and 24 depend upon and further limit claim 1. It is respectfully submitted that each of these claims is also patentable over the Japanese patent document in view of Deibel '499.

6. New Claims 24 - 28

Applicants have submitted new claims 24 - 28. It is respectfully submitted that each of these claims is patentable over the art of record.

New claim 24 is dependent on claim 1. Applicants have discussed above the many reasons for patentability of claim 1. In addition, claim 24 recites that the baffle plate is steel and has an average cross-sectional thickness of over 500% than the thickness of the can. This structure is not disclosed or suggested, in combination with the features recited in claim 1, in the art of record. It is respectfully submitted that claim 24 is patentable.

Claims 25 - 28 are also patentable. New claim 25 is directed to a combination including, among other things, a steel can, a steel baffle plate, and a filter element oriented within the steel can. The baffle plate has a thickness that is at least 400% of the thickness of the steel can. The baffle plate also has an outer annular surface. The steel can is secured to the steel baffle plate along a laser welded seam that is between the can and the outer annular surface of the baffle plate.

None of the references cited by the Examiner discloses or suggests the invention of claim 25. For example, none of the references discloses or suggests a laser welded seam between the outer annular surface of the baffle plate and the can. The various joints in Deibel '499 that include welds are not along outer annular surfaces, as this language is used in the context of the claim.

Claims 26 - 28 depend upon and further limit claim 25. For at least all of these reasons, Applicants respectfully submit that new claims 25 - 28 are patentable.

7. Summary

In summary, claims 1 - 8, 10 - 14, and 24 - 28 are pending. It is respectfully submitted that each of these claims is allowable over the prior art of record. Applicants request reconsideration and a Notice of Allowance.

If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Date: 16 October 2003

Julie R. Daulton
Reg. No. 36,414
JRD:st

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Stenerson et al.	Examiner:	M.O. Savage
Serial No.:	10/084,769	Group Art Unit:	1723
Filed:	02/25/2002	Docket No.:	758.1040USD1
Title:	LIQUID FILTER CONSTRUCTION AND METHODS		

Courtesy Copy of Sheet 1 of 3 of Form 1449 partially initialed by Examiner

Date Mailed: February 25, 2002

FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 758.1040USD1	Application Number: NEW FILING
	Applicant: STENERSEN ET AL.	
	Filing Date: NEW FILING	Group Art Unit: NEW FILING

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MS	2,884,133	04/1959	Walulik et al.			
MS	3,297,162	01/1967	Mouwen			
MS	4,231,488	11/1980	Ward et al.			
MS	4,320,847	03/1982	Gesser et al.			
MS	4,505,816	03/1985	Wozniak et al.			
MS	4,673,814	06/1987	Schroeder et al.			
MS	4,719,012	01/1988	Groezinger et al.			
MS	4,743,374	05/1988	Stifelman			
MS	4,854,467	08/1989	Budenbender			
MS	4,859,328	08/1989	Groezinger et al.			
MS	4,883,083	11/1989	Fisher et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
MS	0 099 472 A2	02/1984	EP	—	—		X
MS	0 255 591 A1	02/1988	EP	—	—		X
MS	0 858 823 A1	08/1998	EP				
MS	2544021	10/1984	FR				
MS	WO 93/16315	08/1993	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Declaration of Eivind Stenersen with Exhibits A1-D3

EXAMINER M. Sewrazn	DATE CONSIDERED 6-03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Stenerson et al.	Examiner:	M.O. Savage
Serial No.:	10/084,769	Group Art Unit:	1723
Filed:	02/25/2002	Docket No.:	758.1040USD1
Title:	LIQUID FILTER CONSTRUCTION AND METHODS		

COPY OF STENERSON DECLARATION DATED 10/14/99 AND EXHIBITS

S/N 09/401,104 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	STENERSEN ET AL.	Examiner:	UNKNOWN
Serial No.:	09/401,104	Group Art Unit:	
Filed:	SEPTEMBER 22, 1999	Docket No.:	758.1040US01
Title:	LIQUID FILTER CONSTRUCTION AND METHODS		

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on 15 October 1999, 1999.

By: Kristine A. Wacek
Name: Kristine A. Wacek

DECLARATION OF EIVIND STENERSEN

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

I, Eivind Stenersen, do hereby declare as follows:

1. I am one of the persons named as an inventor for this application.

2. Attached as Exhibit A are color photographs of a Baldwin BF853 fuel filter. The fuel filter depicted in these photographs existed publicly before the filing date of this patent application.

Exhibit A1 shows a side elevational view and a close–up, perspective view of the Baldwin fuel filter. It is my belief that the top plate 10 is secured to the can 12 by a laser weld joint 14.

Exhibit A2 shows a top end view, and a bottom end view. Exhibit A3 shows a perspective view.

It is my belief that the thickness of the can 12 is the same as the thickness of the end plate 10. I base my belief upon the fact that I cut open a Baldwin BF853 fuel filter. The particular Baldwin BF853 fuel filter that I cut open was not the identical fuel filter that is photographed, but it carries the same part number and appears to be constructed identically to the fuel filter shown in the photographs. I visually inspected the wall thickness of the end plate 10

and the can 12. The can 12 and the end plate 10 appear visually to have about the same thickness.

3. Exhibit B shows photographs of a Caterpillar oil filter, carrying Part No. 7W/2327. The oil filter shown in the photographs existed publicly before the filing date of this patent application.

Exhibit B1 shows a side elevational view and an end view of the oil filter. The can 20 is connected to the gasket retainer 22 by a roll or lock seam. The baffle plate 21 is secured to the gasket retainer 22 by projection welds. Exhibit B2 shows an end view of the can 20, and a perspective view of the oil filter. Exhibit B3 shows a close–up of the connection between the can 20 and gasket retainer 22. Exhibit B3 also shows a perspective view of the oil filter, as a whole.

4. Exhibit C shows photographs of a Donaldson Lube Filter, carrying Part No. P554403. The lube filter shown in these photographs existed publicly before the filing date of this patent application.

Exhibit C1 shows two perspective views of the lube filter. There is a can 30 connected to a gasket retainer 32 by a roll or lock seam. The gasket retainer 32 is secured to the baffle plate 31 by projection welds. Exhibit C2 shows opposite end views of the lube filter. Exhibit C3 shows a close–up perspective view of the connection between the can 30 and gasket retainer 32. Exhibit C3 also shows a side elevational view of the lube filter.

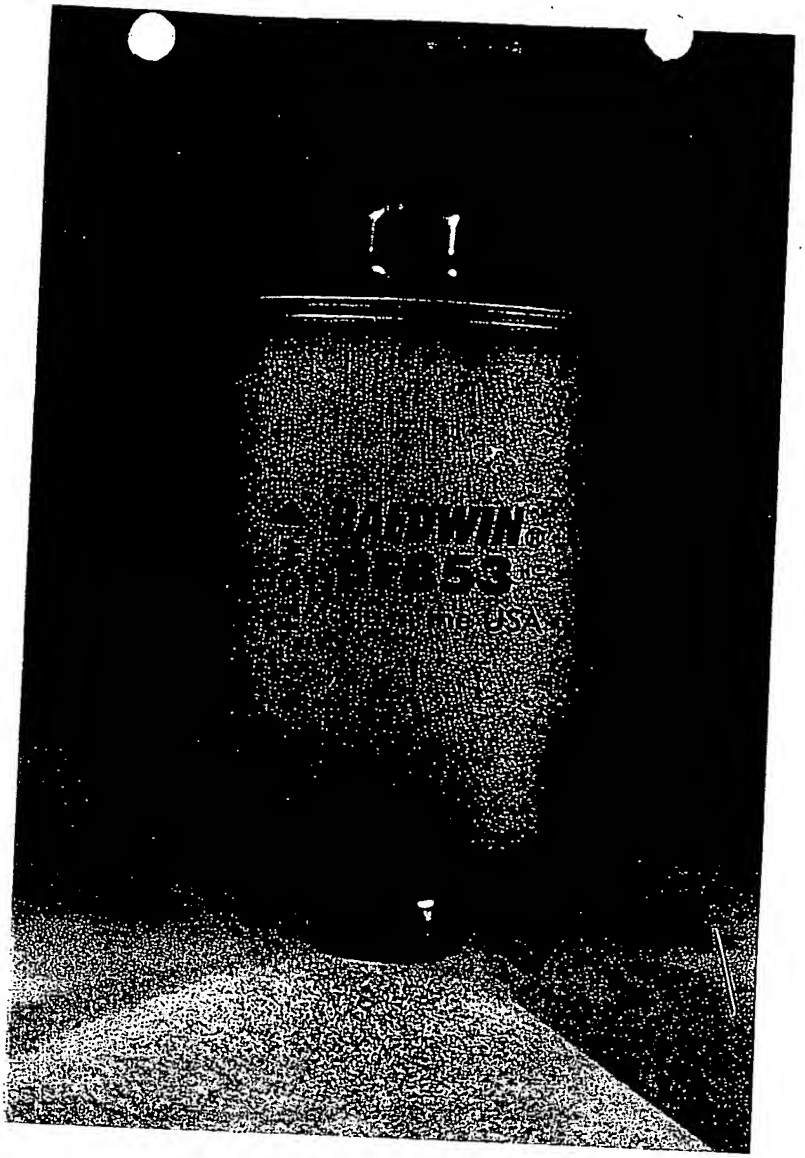
5. Exhibit D shows a Deutz lube oil filter, carrying Part No. 1174421. The lube filter depicted in these photographs exhibited publicly before the filing date of this patent application.

Exhibit D1 shows opposite end views of the lube oil filter. The can 40 is connected to the gasket retainer 42 by a roll or lock seam. The baffle plate 41 is secured to the gasket retainer 42 with tabs that are folded in through the flow holes in the baffle plate. Exhibit D2 shows a side elevational view and a perspective view of the oil filter. Exhibit D3 shows a close–up perspective view of the connection between the can 40 and the gasket retainer 42. Exhibit D3 also shows a perspective view of the oil filter.

6. I hereby declare that all statements made herein of my own knowledge are true, and that all statements on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 10/14/99

Eivind Stenersen



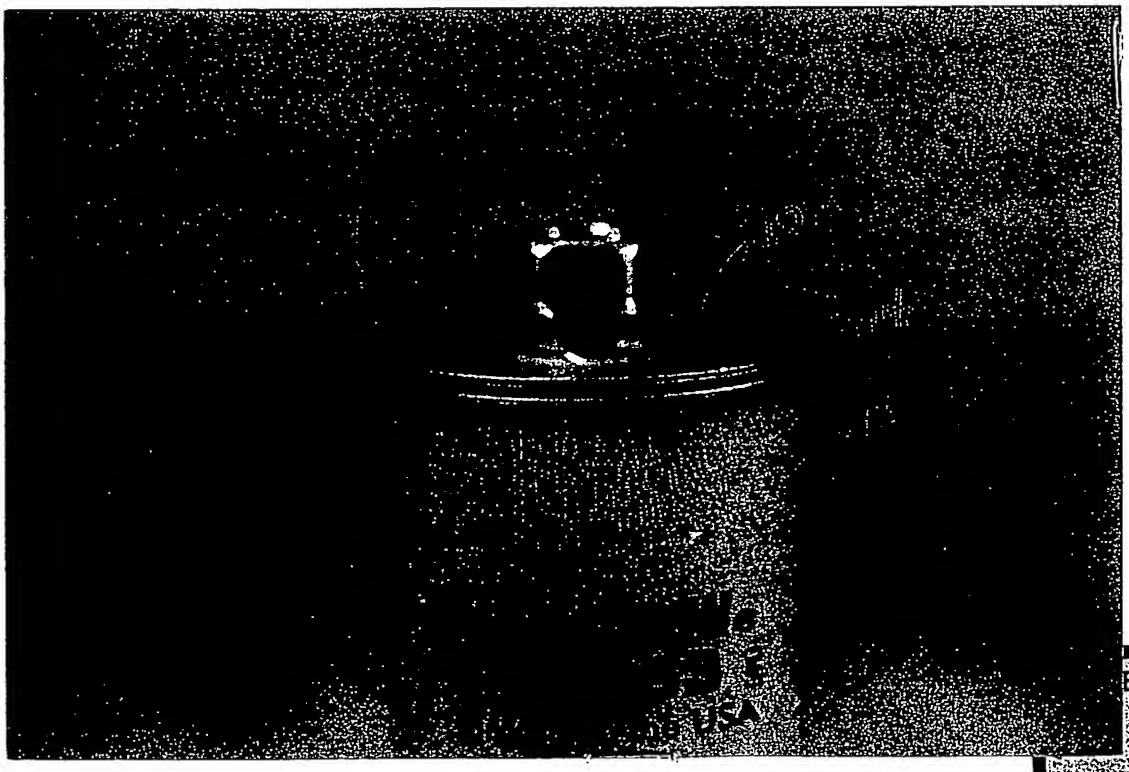
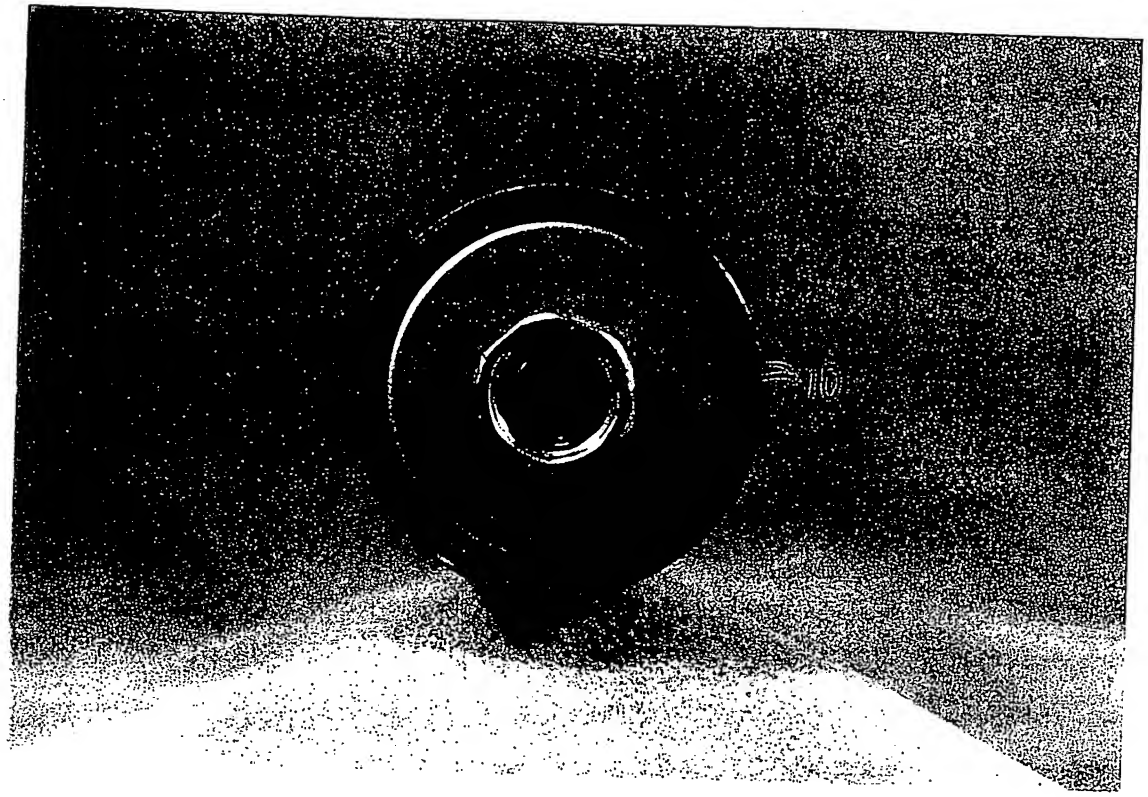


EXHIBIT
A1



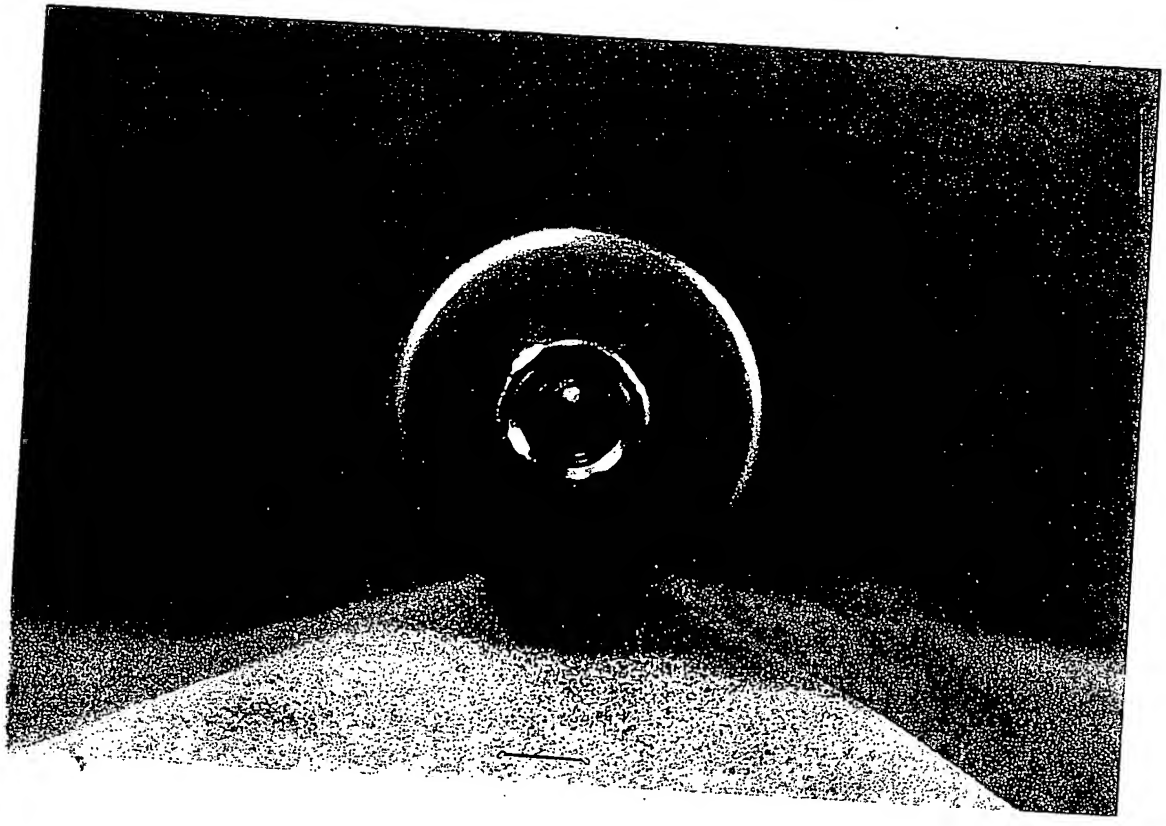
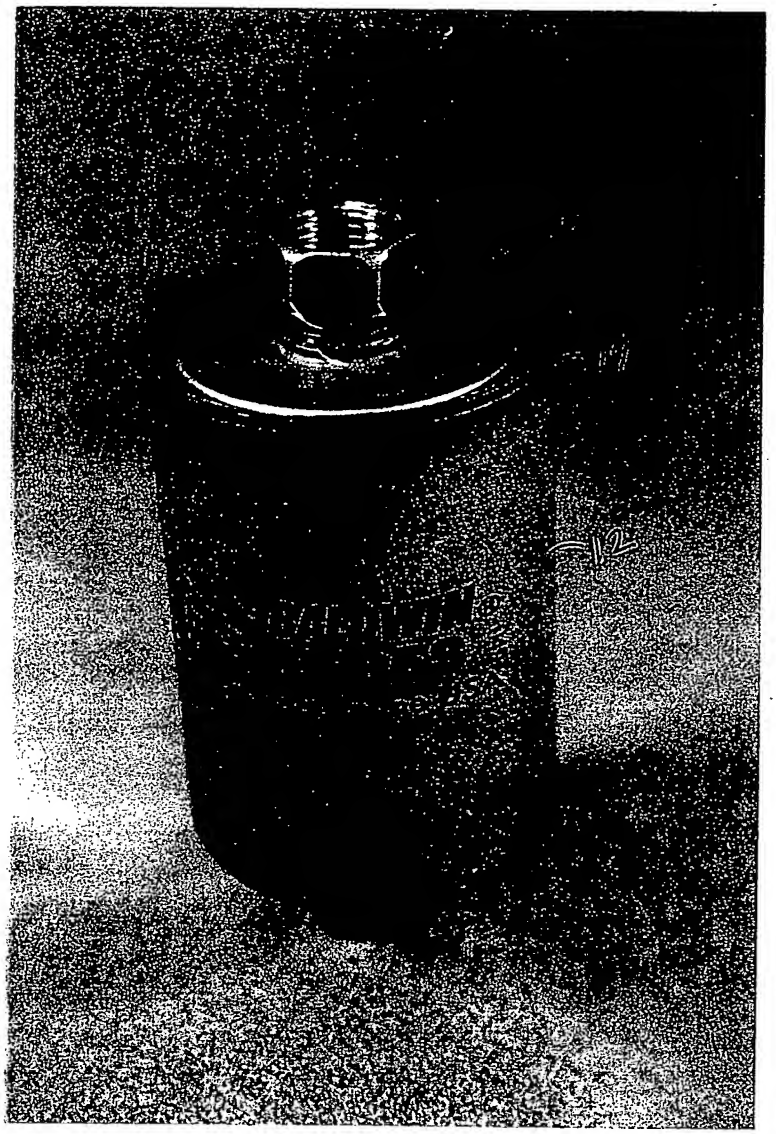
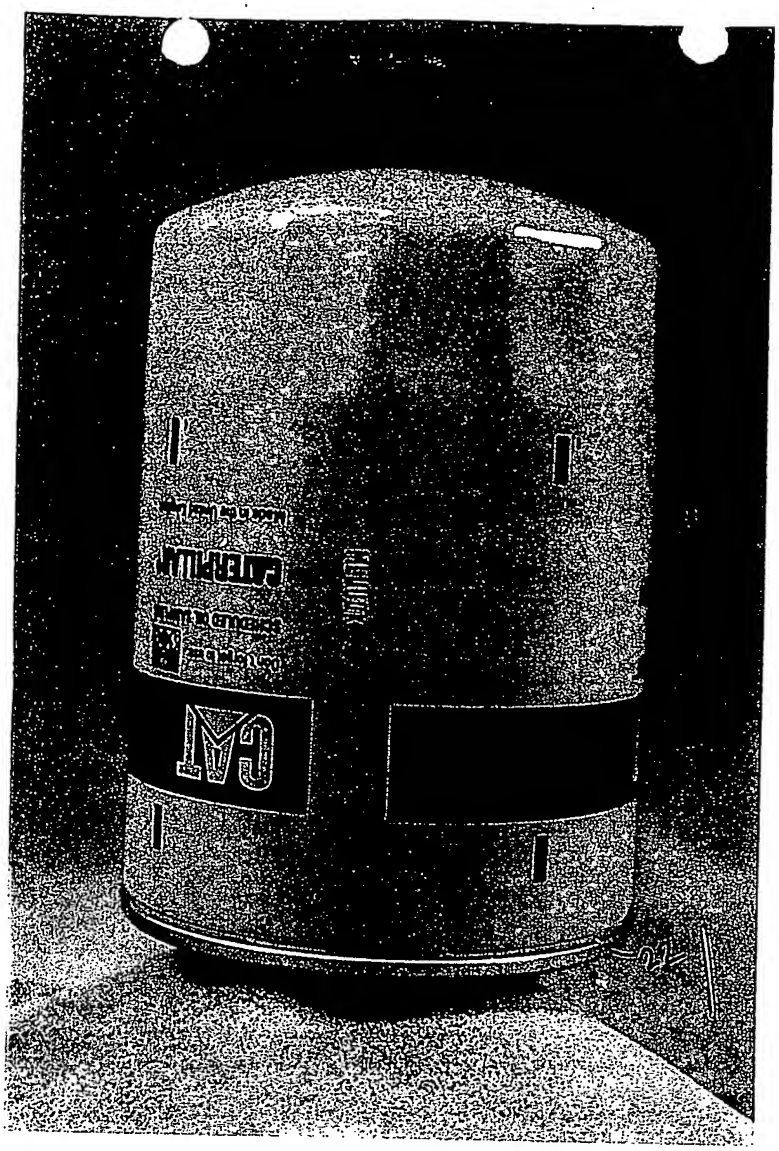


EXHIBIT
A2



EXHIBIT

A3



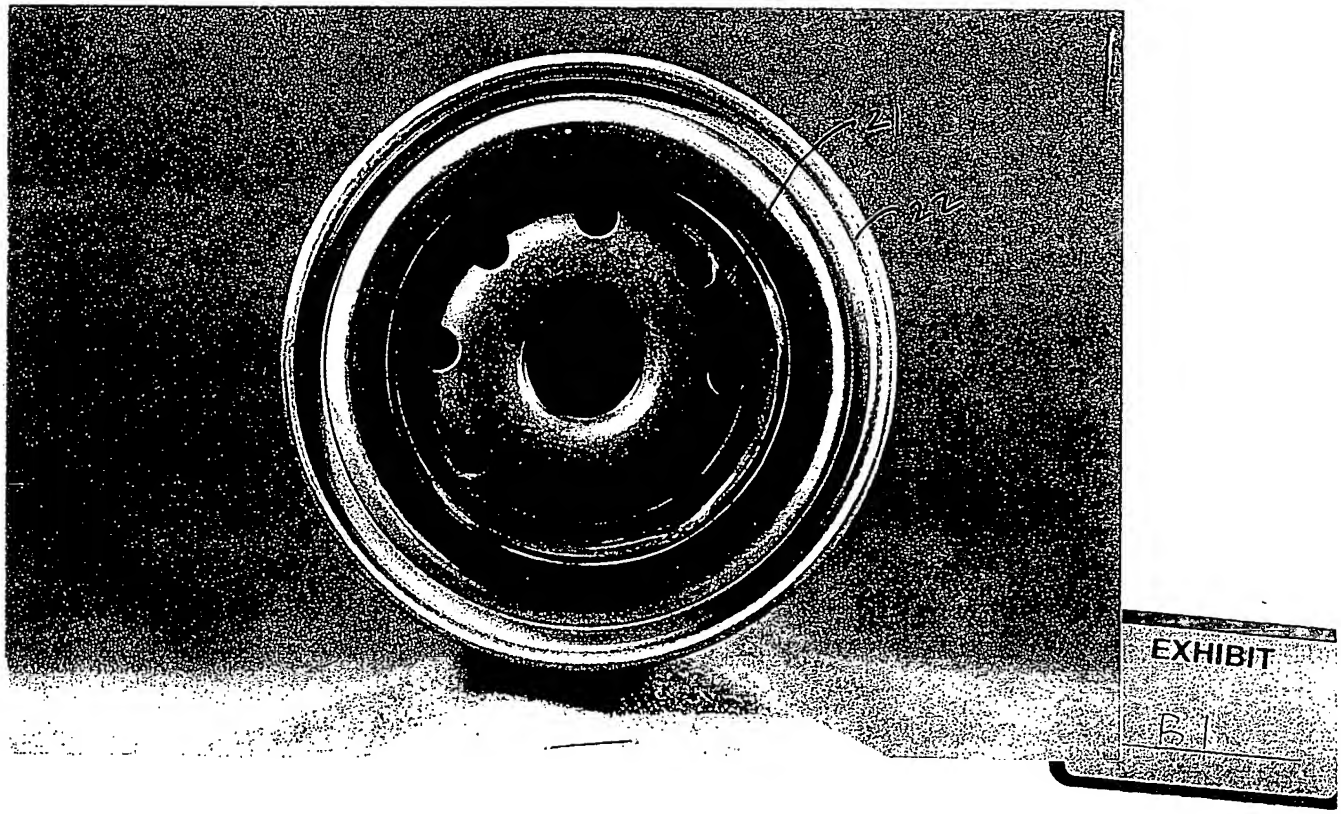
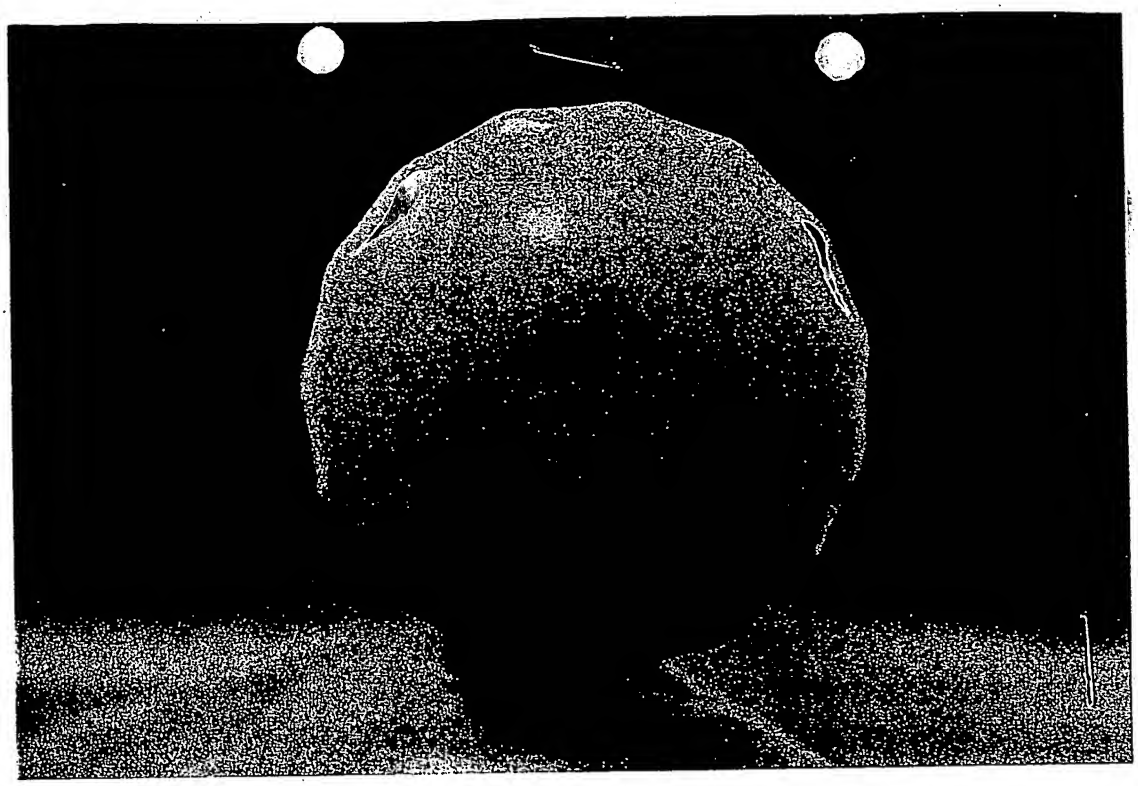


EXHIBIT
B1



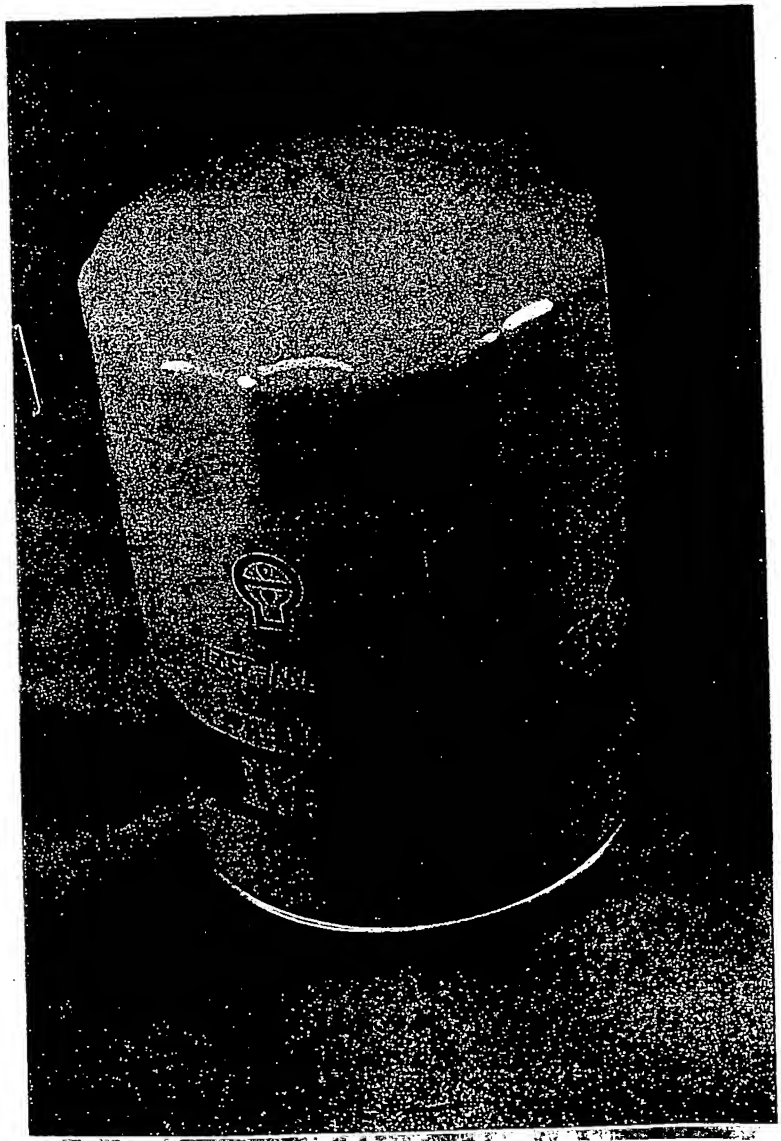
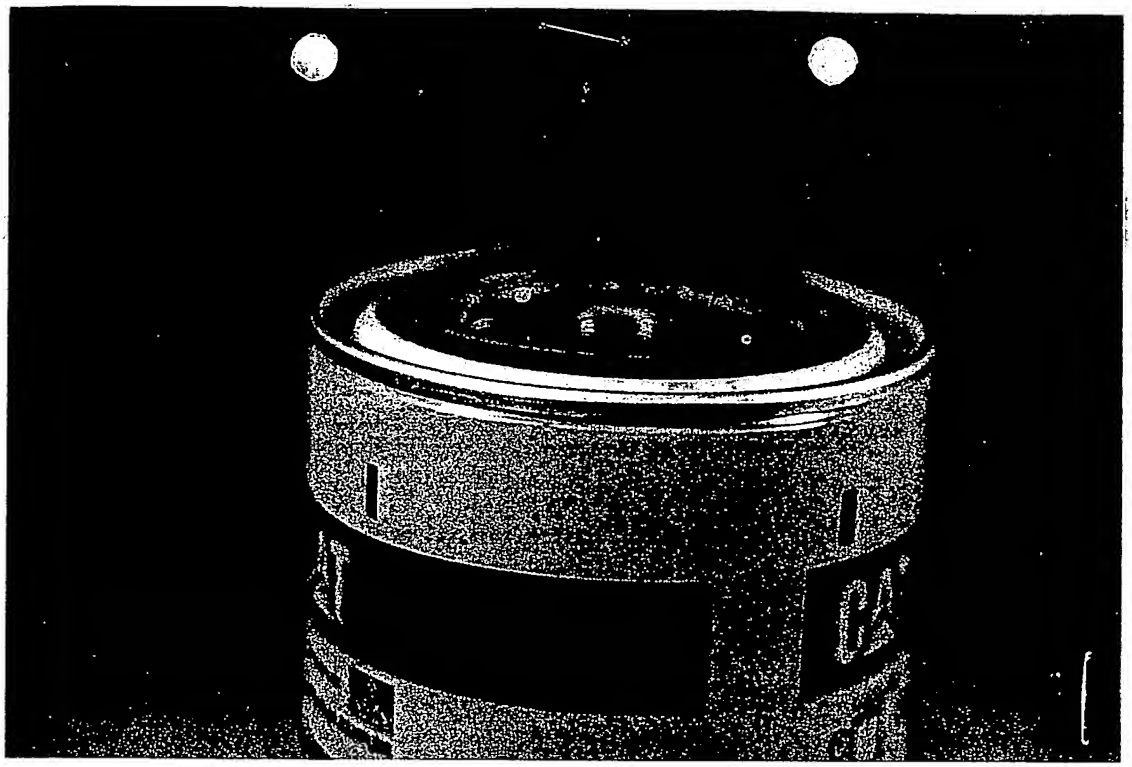
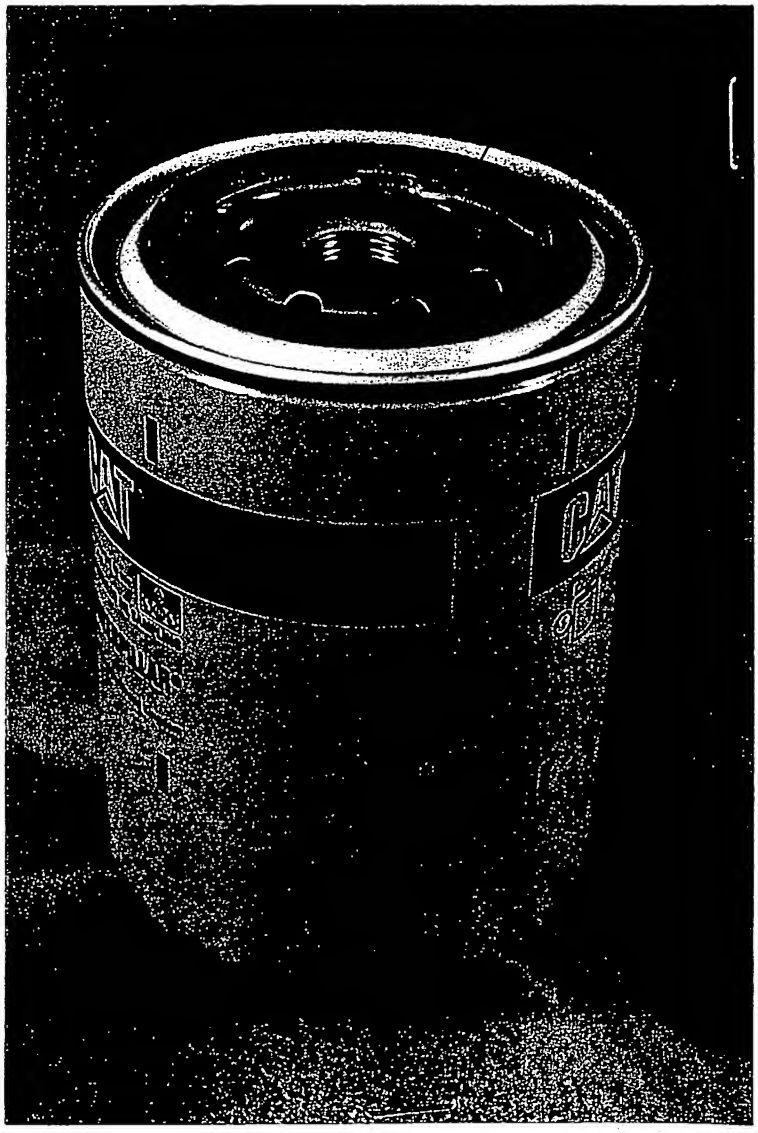


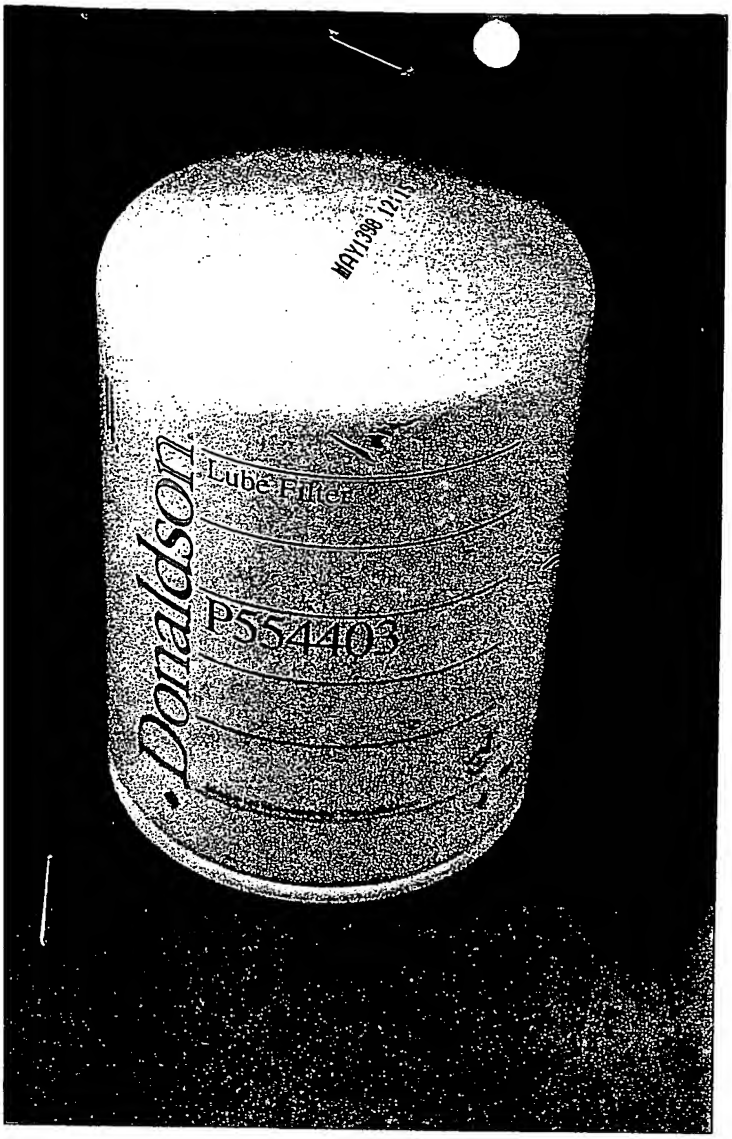
EXHIBIT
B2

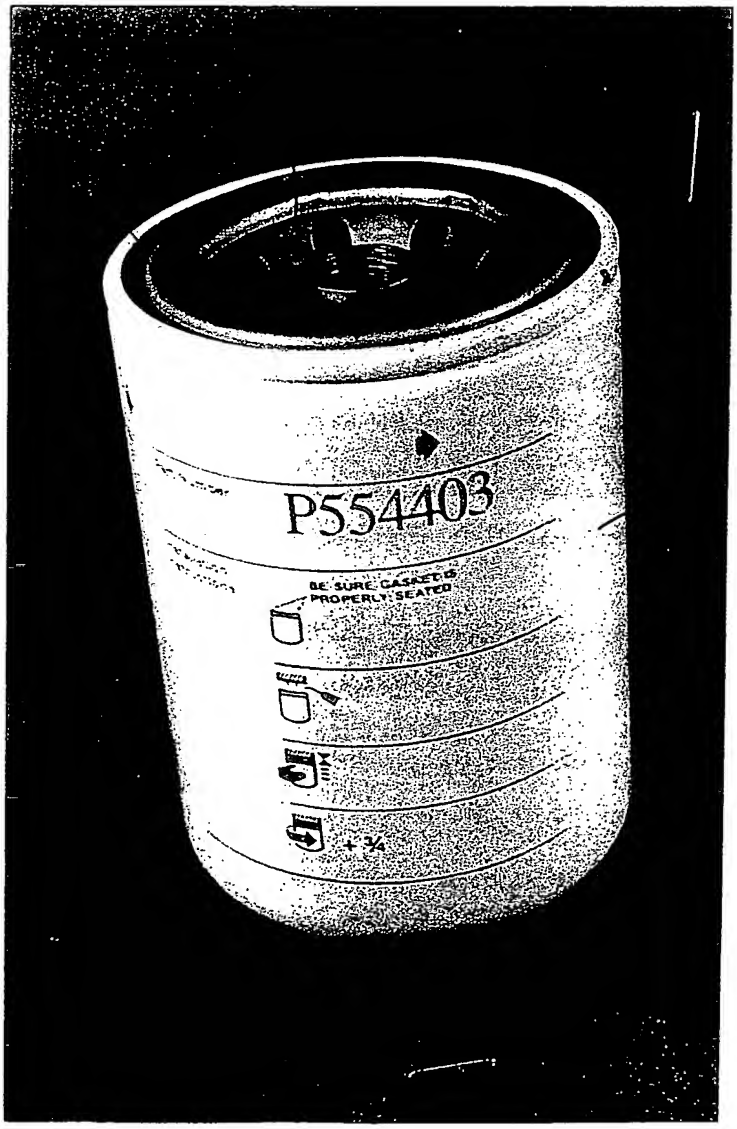




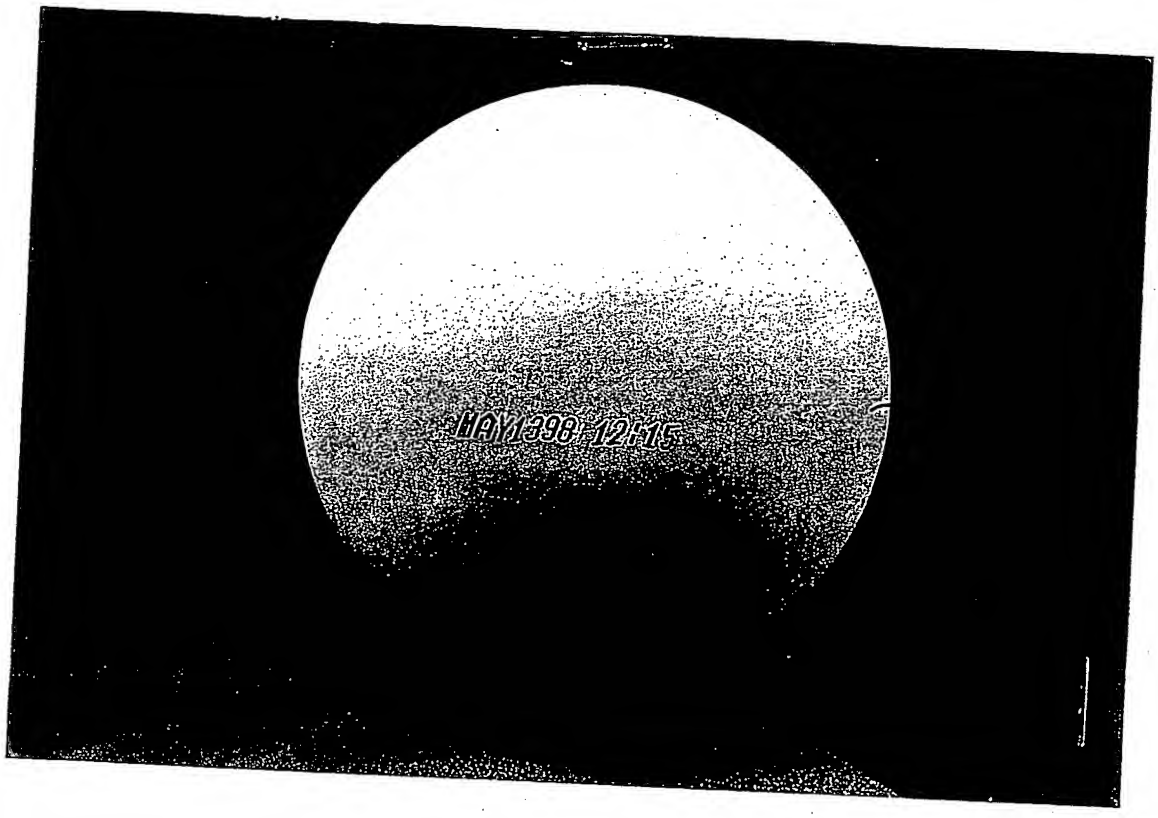
EXHIBIT

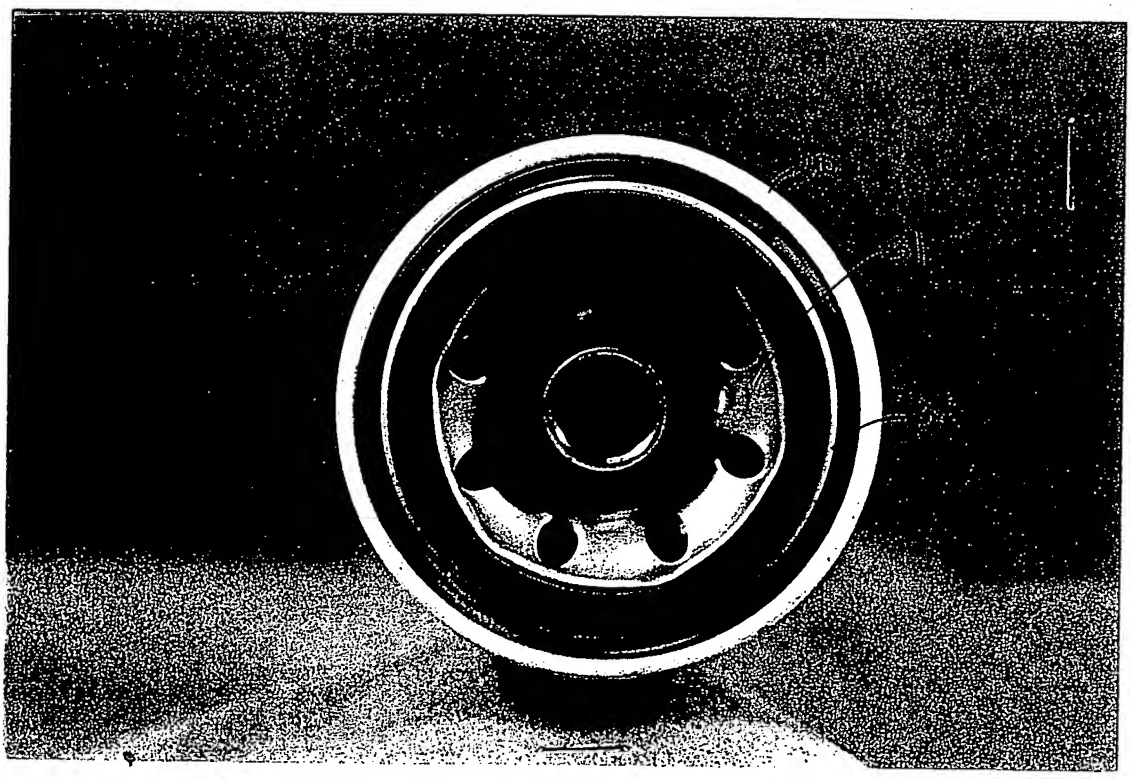
15


Donaldson
Lube Filter
P554403

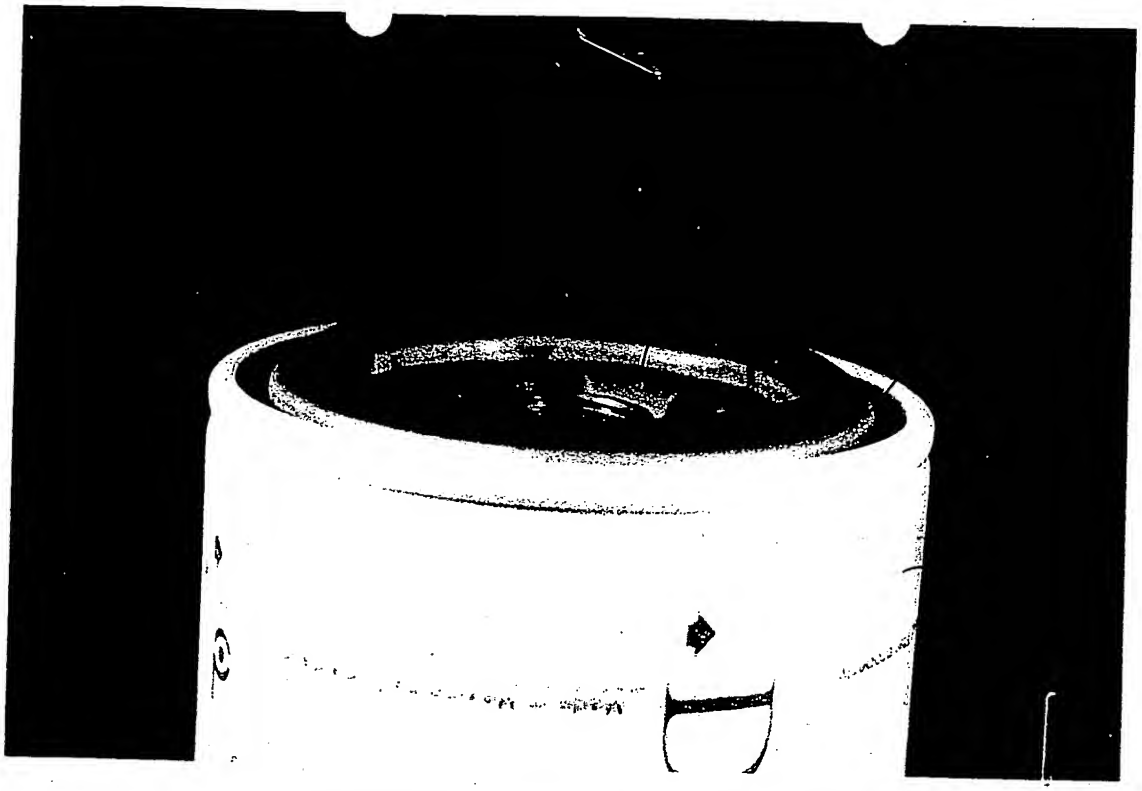

P554403
BE SURE GASKET IS PROPERLY SEATED
+ ¾

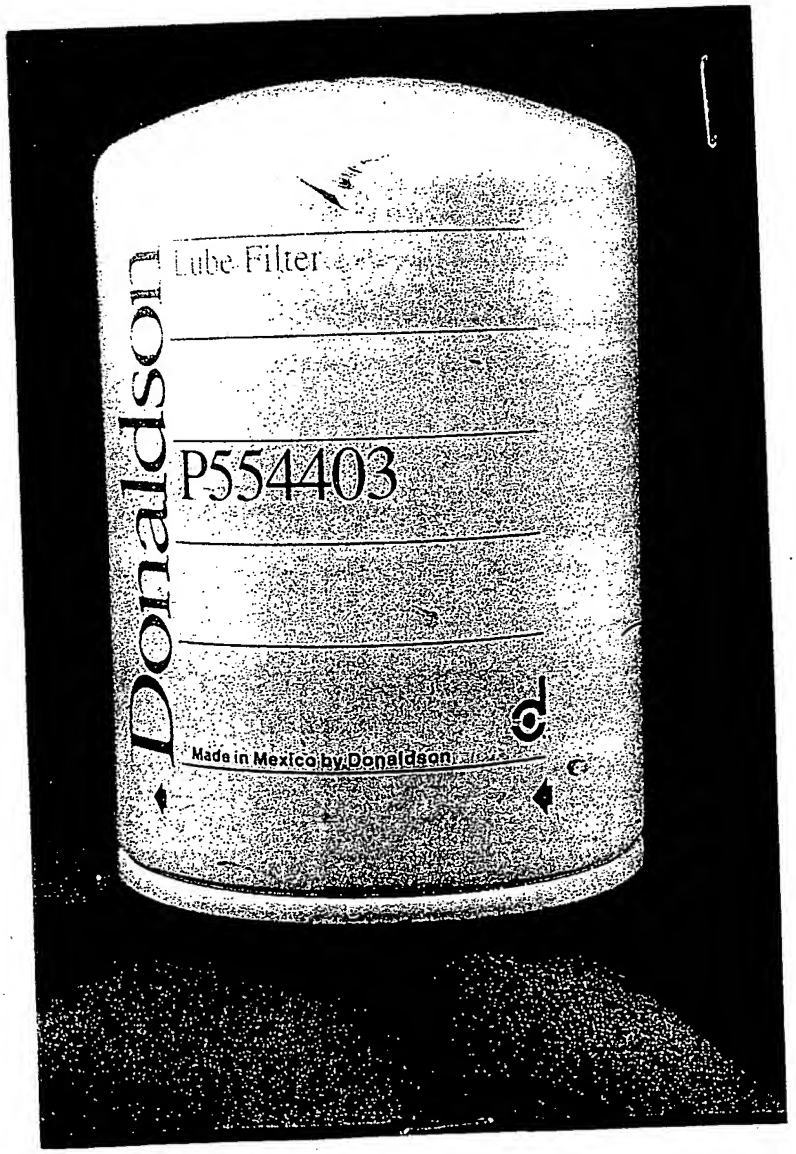
EXHIBIT



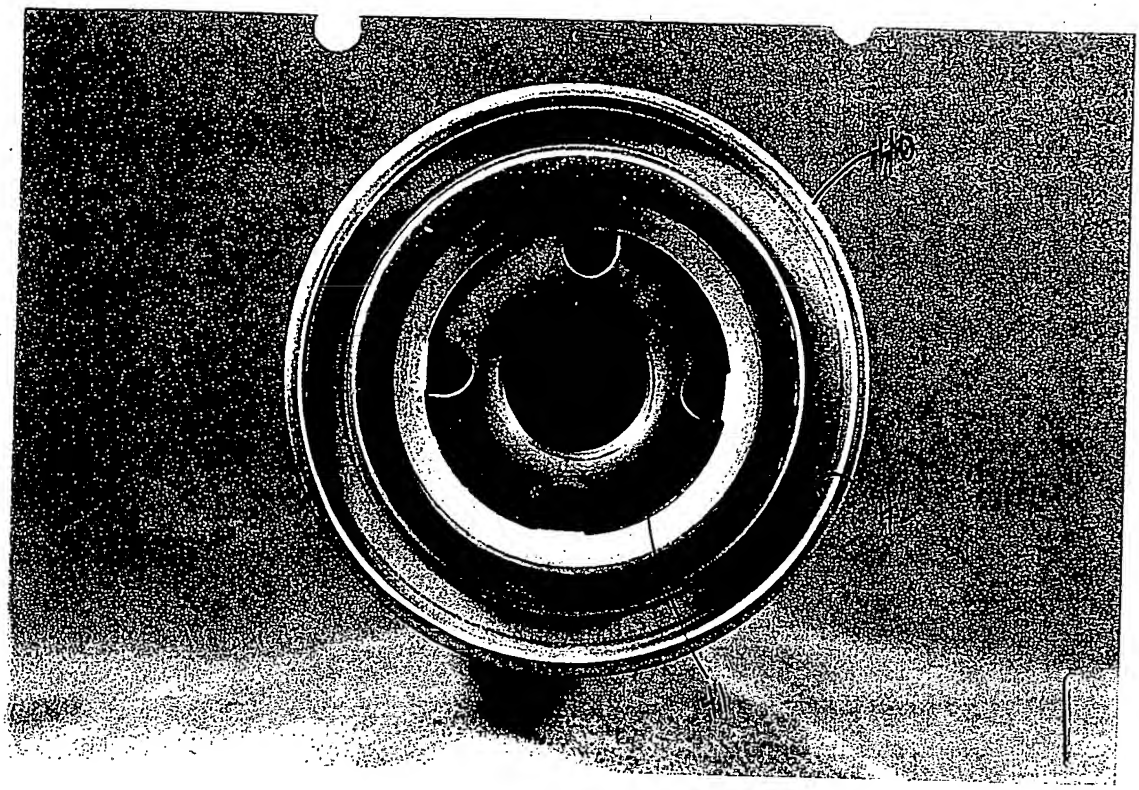


EXHIBIT





EXHIBIT



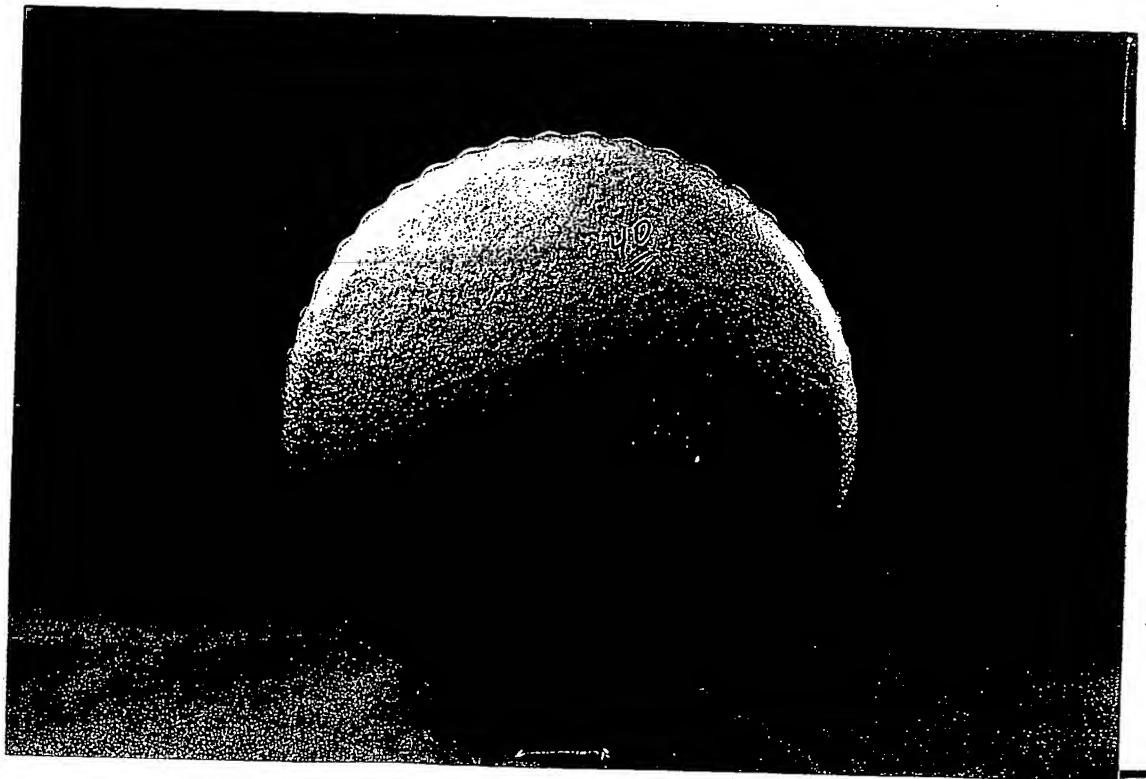
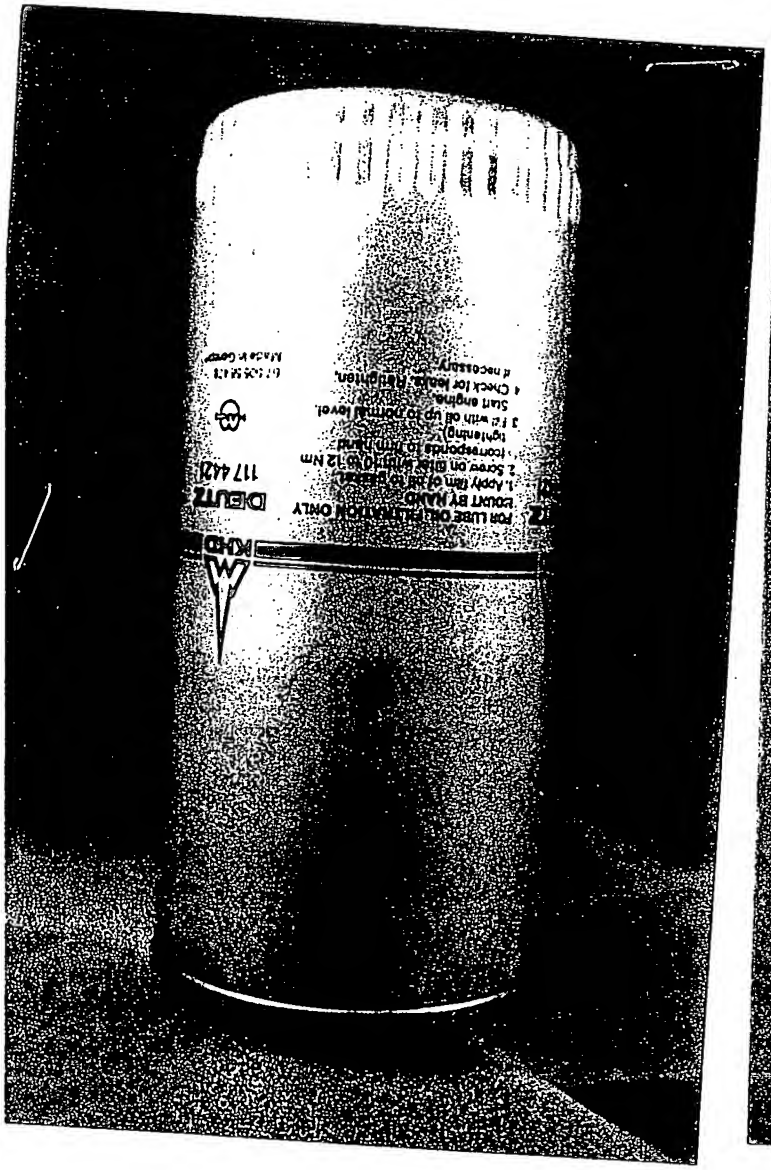


EXHIBIT
D-1



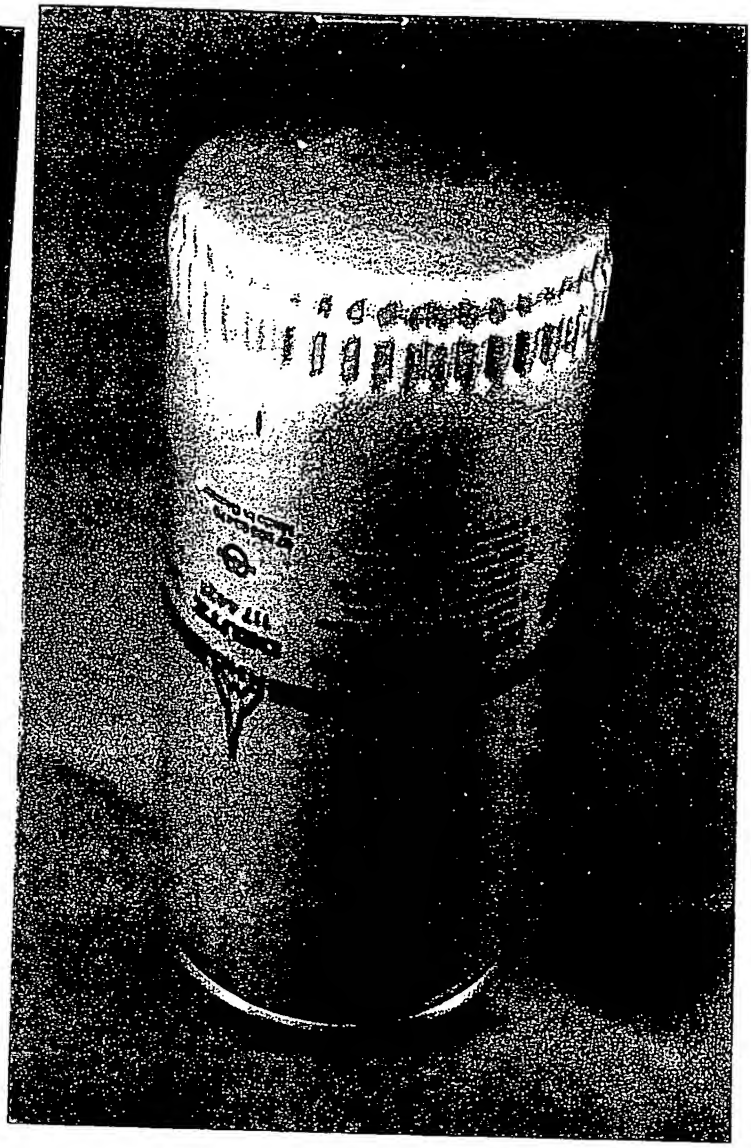
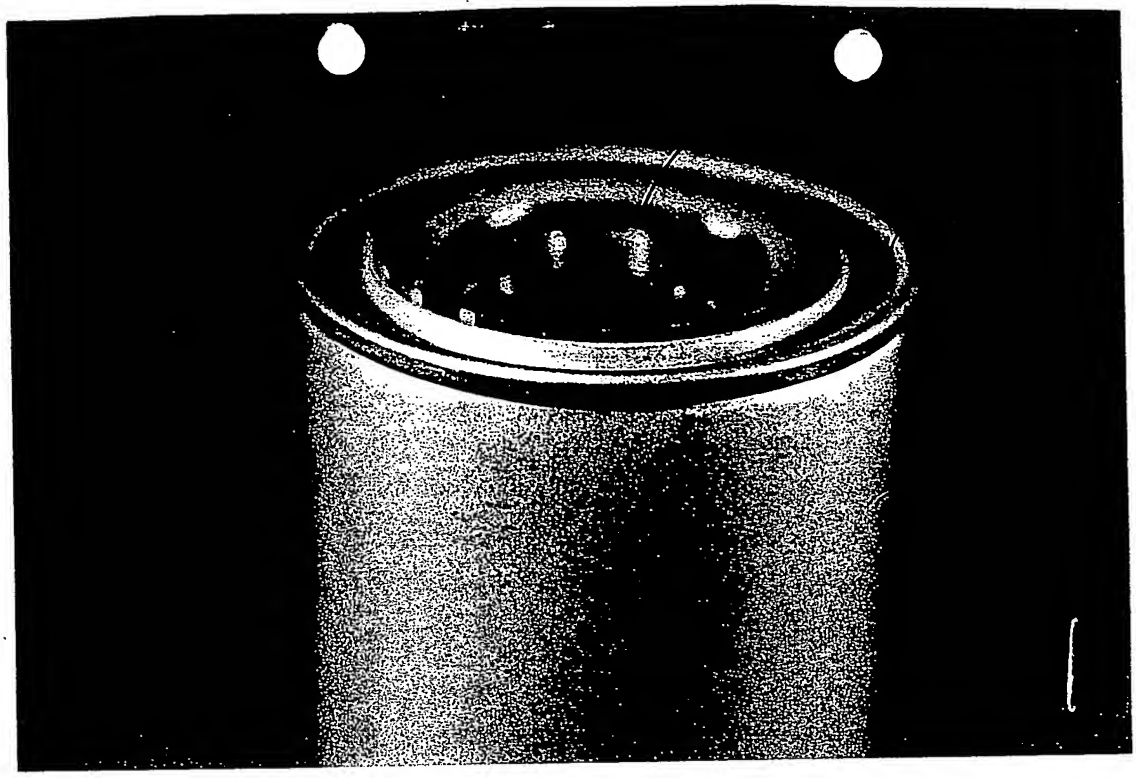
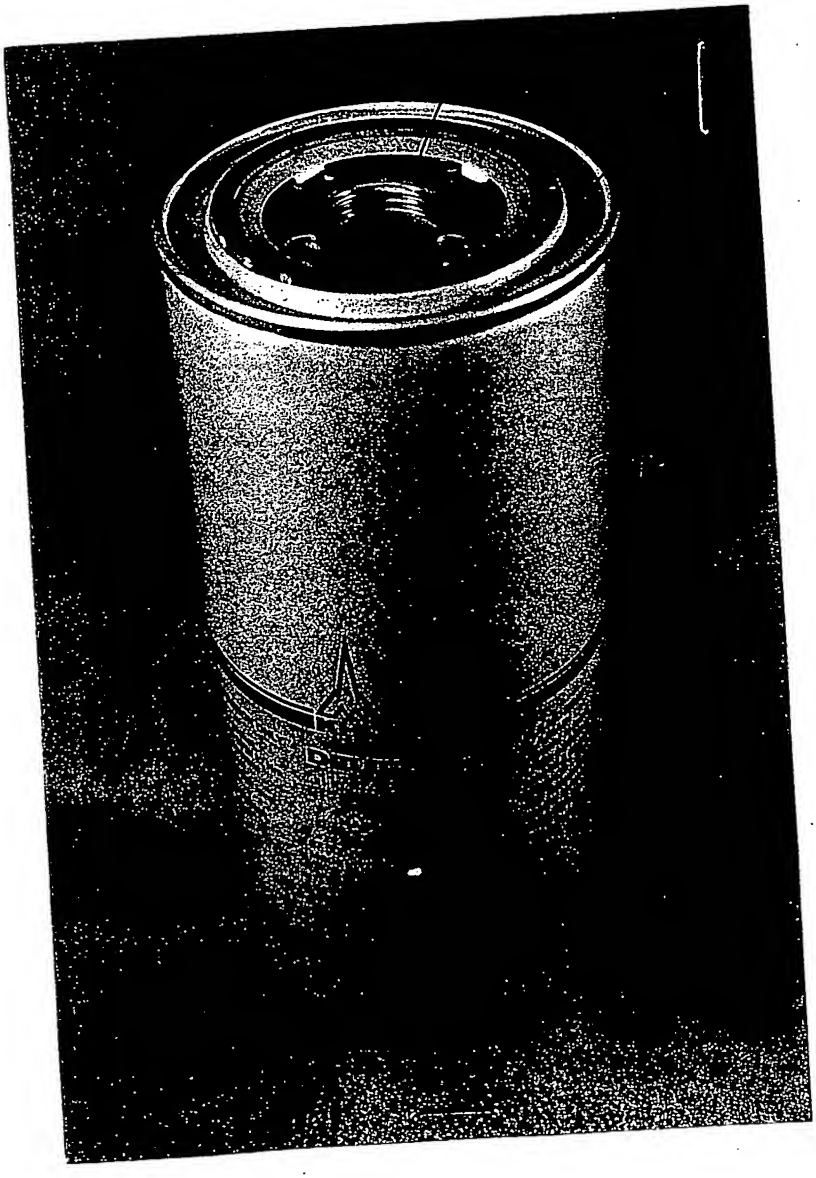


EXHIBIT
D-2





EXHIBIT

D-3